AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method for designing an electronic assembly, the method comprising the steps of:

transmitting a user interface that requests entry of electronic assembly design data,

receiving user-supplied electronic assembly design data via the user interface,

retrieving assembly cost data in response to receiving the user-supplied electronic assembly design data from an assembly cost database, the assembly cost data including a materials cost and a processing cost,

determining a plurality of work centers based on the user-supplied electronic assembly design data, each of the plurality of work centers defining a different manufacturing process step of the electronic assembly,

determining a per-unit setup cost value and a per-unit run cost value for each work center of the plurality of work centers based on the assembly cost data,

summing the per-unit setup cost values to determine a total per-unit setup cost,

summing the per-unit run cost values to determine a total per-unit run cost,

summing the total per-unit setup cost value and the total per-unit run cost value to determine a total per-unit cost value, and

updating the user interface using the assembly cost data to display the total per-unit cost value.

2.   (Previously Presented) The method of claim 1, wherein transmitting a user interface comprises transmitting the user interface to a client machine via a publicly-accessible global network in response to a user-supplied request received by a server machine via the publicly-accessible global network.

3. (Previously Presented) The method of claim 1, wherein transmitting a user interface comprises transmitting the user interface application from a server machine to a client machine via the Internet.

4. (Previously Presented) The method claim 1, wherein transmitting a user interface comprises transmitting an assembly cost database with the user interface from a server machine to a client machine via a publicly-accessible global network.

5. (Previously Presented) The method of claim 1, wherein receiving user-supplied electronic assembly design data comprises receiving user-supplied electronic assembly design data via an input device of a client machine.

6. (Previously Presented) The method of claim 1, wherein receiving user-supplied electronic assembly design data comprises receiving user-supplied electronic assembly design data via a publicly-accessible global network.

7. (Previously Presented) The method of claim 1, wherein retrieving assembly cost data comprises retrieving the assembly cost data from an assembly cost database stored on a client machine in response to the user-supplied electronic assembly design data.

8. (Previously Presented) The method of claim 1, wherein retrieving assembly cost data comprises retrieving the assembly cost data, via a publicly-accessible global network, from an assembly cost database stored on a server machine in response to a user-supplied electronic assembly design data.

9. (Previously Presented) The method of claim 1, wherein retrieving assembly cost data comprises includes retrieving the assembly cost data from a server machine via a publicly-accessible global network.

10. (Previously Presented) The method of claim 1, further comprising retrieving assembly capability data from an assembly capability database in response to the user-supplied electronic assembly design data.

11. (Previously Presented) The method of claim 10, further comprising updating the user interface on a client machine based on the assembly capability data.

12. (Previously Presented) The method of claim 11, wherein updating the user interface on a client machine based on the assembly capability data includes displaying a traffic light image to a user.

13-16. (Cancelled)

17. (Previously Presented) The method of claim 1, further comprising determining a tooling cost value in response to and associated with the user-supplied electronic assembly design data.

18. (Previously Presented) The method of claim 17, wherein determining a tooling cost value comprises determining a tooling cost value based on the assembly cost data.

19. (Previously Presented) The method of claim 1, further comprising:
determining a user selected-portion of the user interface,
retrieving an electronic assembly design image based on the user selected-portion, and
displaying the electronic assembly design image on a client machine to the user.

20.   (Currently Amended) A method for designing an electronic assembly, the method comprising the steps of:

transmitting a user interface that requests entry of electronic assembly design data,

receiving user-supplied electronic assembly design data via the user interface,

retrieving assembly capability data that indicates the manufacturing capability of an electronic assembly manufacturer in response to receiving the user-supplied electronic assembly design data from an assembly capability database, ~~the assembly capability data including a range of tolerances within the manufacturing capability of the electronic assembly manufacturer,~~

comparing the assembly design data to the assembly capability data to determine whether the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer, and

~~updating the user interface based on the assembly capability data~~ displaying indicia on the user interface if the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer, the indicia being configured to notify a user that the manufacturing capability of the electronic assembly manufacturer has been exceeded.

21.   (Previously Presented) The method of claim 20, wherein transmitting a user interface comprises transmitting the user interface to a client machine via a publicly-accessible global network in response to a user-supplied request received by a server machine via the publicly-accessible global network.

22.   (Previously Presented) The method of claim 20, wherein transmitting a user interface comprises transmitting the user interface from a server machine to a client machine via the Internet.

23.   (Previously Presented) The method claim 20, wherein transmitting a user interface comprises transmitting an assembly capability database with the user interface from a server machine to a client machine via a publicly-accessible global network.

24.   (Previously Presented)   The method of claim 20, wherein receiving user-supplied electronic assembly design data comprises receiving user-supplied electronic assembly design data via an input device of a client machine.

25.   (Previously Presented)   The method of claim 20, wherein receiving user-supplied electronic assembly design data comprises receiving user-supplied electronic assembly design data via a publicly-accessible global network.

26.   (Previously Presented)   The method of claim 20, wherein retrieving assembly capability data comprises retrieving assembly capability data from an assembly capability database stored on a client machine in response to the user-supplied electronic assembly design data.

27.   (Previously Presented)   The method of claim 20, wherein retrieving assembly capability data comprises retrieving assembly capability data, via a publicly-accessible global network, from an assembly capability database stored on a server machine based on the user-supplied electronic assembly design data.

28.   (Previously Presented)   The method of claim 27, wherein retrieving assembly capability data comprises retrieving the assembly capability data via a publicly-accessible global network.

29.   (Previously Presented)   The method of claim 20, wherein updating the user interface comprises displaying a traffic light image to a user.

30.   (Previously Presented) The method of claim 20, further comprising:

determining a user selected-portion of the user interface,

retrieving an electronic assembly design image based on the user selected-portion, and

displaying the electronic assembly design image on a client machine to the user.

31.   (Currently Amended) A method for designing an electronic assembly, the method comprising:

transmitting a user interface that requests entry of electronic assembly design data,

receiving user-supplied electronic assembly design data via the user interface,

retrieving assembly cost data in response to receiving the user-supplied electronic assembly design data from an assembly cost database,

determining a plurality of work centers based on the user-supplied electronic assembly design data, each of the plurality of work centers defining a manufacturing process step of the electronic assembly,

determining a per-unit setup cost value and a per-unit run cost value for each work center of the plurality of work centers based on the assembly cost data,

determining a total per-unit setup cost value and a total per-unit run cost value,

determining a total per-unit cost value based on the total per-unit setup cost value and the total per-unit run cost value,

retrieving assembly capability data that indicates the manufacturing capability of an electronic assembly manufacturer in response to receiving the user-supplied electronic assembly design data from an assembly capability database, the assembly capability data including a range of tolerances within the manufacturing capability of the electronic assembly manufacturer,

comparing the assembly design data to the assembly capability data to determine whether the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer; and

updating the user interface ~~based on at least one of the assembly cost data and the assembly capability data~~ to display the total per-unit cost value and to notify a user if the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer.

32.   (Previously Presented)   The method of claim 31, wherein transmitting a user interface comprises transmitting the user interface to a client machine via a publicly-accessible global network in response to a user-supplied request received by a server machine via the publicly-accessible global network.

33.   (Previously Presented)   The method of claim 31, wherein transmitting a user interface comprises transmitting the user interface from a server machine to a client machine via the Internet.

34.   (Previously Presented)   The method claim 31, wherein transmitting a user interface comprises transmitting an assembly cost database and an assembly capability database from a server machine to a client machine via a publicly-accessible global network.

35.   (Previously Presented)   The method of claim 31, wherein receiving user-supplied electronic assembly design data comprises receiving user-supplied electronic assembly design data via an input device of a client machine.

36.   (Previously Presented)   The method of claim 31, wherein receiving user-supplied electronic assembly design data comprises receiving user-supplied electronic assembly design data via a publicly-accessible global network.

37.   (Previously Presented)   The method of claim 31, wherein retrieving assembly cost data comprises retrieving assembly cost data from an assembly cost database stored on a client machine in response to the user-supplied electronic assembly design data.

38.   (Previously Presented)   The method of claim 31, wherein retrieving assembly cost data comprises retrieving assembly cost data from an assembly cost database stored on a server machine in response to the user-supplied electronic assembly design data.

39.   (Previously Presented)   The method of claim 31, wherein retrieving assembly cost data comprises retrieving the assembly cost data from an assembly cost database via a publicly-accessible global network

40.   (Previously Presented)   The method of claim 31, wherein retrieving assembly capability data comprises retrieving assembly capability data from an assembly capability database stored on a client machine in response to the user-supplied electronic assembly design data.

41.   (Previously Presented)   The method of claim 31, wherein retrieving assembly capability data comprises retrieving assembly capability data from an assembly capability database stored on a server machine in response to the user-supplied electronic assembly design data.

42.   (Previously Presented)   The method of claim 31, wherein retrieving assembly capability data comprises retrieving the assembly capability data from an assembly capability database via a publicly-accessible global network

43.   (Previously Presented)   The method of claim 31, wherein updating the user interface comprises displaying a traffic light image to a user.

44-47. (Cancelled)

48.   (Currently Amended)   The method of claim 31, further comprising determining a tooling cost value in response ~~to~~ and associated with ~~to~~ the user-supplied electronic assembly design data.

49.   (Previously Presented)   The method of claim 48, wherein determining a tooling cost value comprises determining a tooling cost value based on the assembly cost data.

50.   (Currently Amended)   An article comprising a computer-readable signal-bearing medium having therein a plurality of instructions which, when executed by a processor, cause the processor to:

    display a user interface that requests entry of electronic assembly design data to a user,

    retrieve assembly cost data in response to receiving user-supplied electronic assembly design data from an assembly cost database,

    <u>determine a plurality of work centers based on the user-supplied electronic assembly design data, each of the plurality of work centers defining a different manufacturing process step of the electronic assembly,</u>

    <u>determine a per-unit setup cost value and a per-unit run cost value for each work center of the plurality of work centers based on the assembly cost data,</u>

    <u>determine a total per-unit setup cost value and a total per-unit run cost value,</u>

    <u>determine a total per-unit cost value based on the total per-unit setup cost value and the total per-unit run cost value,</u>

    retrieve assembly capability data that indicates the manufacturing capability of an electronic assembly manufacturer in response to receiving the user-supplied electronic assembly design data from an assembly capability database,~~the assembly capability data including a range of tolerances within the manufacturing capability of the electronic assembly manufacturer,~~

    <u>compare the assembly design data to the assembly capability data to determine whether the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer; and</u>

update the user interface ~~based on at least one of the assembly cost data and the assembly capability data~~ <u>to display the total per-unit cost value and to notify a user if the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer</u>.

51.   (Previously Presented)   The article of claim 50, wherein the plurality of instructions, when executed by the processor, further cause the processor to retrieve the assembly cost data from the assembly cost database via a publicly-accessible global network.

52.   (Previously Presented)   The article of claim 50, wherein the plurality of instructions, when executed by the processor, further cause the processor to retrieve the assembly capability data from the assembly capability database via a publicly-accessible global network.